

CONTENTS OF VOLUME 69

No. 1, July 1987

Glossary	v
E.R. WEIBEL, C.R. TAYLOR, H. HOPPELER and R.H. KARAS (Switzerland and U.S.A.): Adaptive variation in the mammalian respiratory system in relation to energetic demand: I. Introduction to problem and strategy (RSP 01298)	1
C.R. TAYLOR, R.H. KARAS, E.R. WEIBEL and H. HOPPELER (U.S.A. and Switzerland): Adaptive variation in the mammalian respiratory system in relation to energetic demand: II. Reaching the limits to oxygen flow (RSP 01299)	7
H. HOPPELER, S.R. KAYAR, H. CLAASSEN, E. UHLMANN and R.H. KARAS (Switzerland and U.S.A.): Adaptive variation in the mammalian respiratory system in relation to energetic demand: III. Skeletal muscles: setting the demand for oxygen (RSP 01300)	27
K.E. CONLEY, S.R. KAYAR, K. RÖSLER, H. HOPPELER, E.R. WEIBEL and C.R. TAYLOR (Switzerland and U.S.A.): Adaptive variation in the mammalian respiratory system in relation to energetic demand: IV. Capillaries and their relationship to oxidative capacity (RSP 01301)	47
R.H. KARAS, C.R. TAYLOR, K. RÖSLER and H. HOPPELER (U.S.A. and Switzerland): Adaptive variation in the mammalian respiratory system in relation to energetic demand: V. Limits to oxygen transport by the circulation (RSP 01302)	65
E.R. WEIBEL, L.B. MARQUES, M. CONSTANTINOPOLIS, F. DOFFEY, P. GEHR and C.R. TAYLOR (Switzerland and U.S.A.): Adaptive variation in the mammalian respiratory system in relation to energetic demand: VI. The pulmonary gas exchanger (RSP 01303)	81
R.H. KARAS, C.R. TAYLOR, J.J. JONES, S.L. LINDSTEDT, R.B. REEVES and E.R. WEIBEL (U.S.A. and Switzerland): Adaptive variation in the mammalian respiratory system in relation to energetic demand: VII. Flow of oxygen across the pulmonary gas exchanger (RSP 01304)	101
C.R. TAYLOR, E.R. WEIBEL, R.H. KARAS and H. HOPPELER (U.S.A. and Switzerland): Adaptive variation in the mammalian respiratory system in relation to energetic demand: VIII. Structural and functional design principles determining the limits to oxidative metabolism (RSP 01305)	117

No. 2, August 1987

M.D. HAMMOND and S.C. HEMPLEMAN (U.S.A.): Oxygen diffusing capacity estimates derived from measured VA/Q distributions in man (RSP 01292)	129
I. MAYERS, P.H. BREEN, S. GOTTLIER, R. LONG and L.D.H. WOOD (U.S.A.): The effects of indomethacin on edema and gas exchange in canine acid aspiration (RSP 01294)	149
R. SORKNESS and E. VIDRUK (U.S.A.): Reflex effects of isocapnic changes in ventilation on tracheal tone in awake dogs (RSP 01295)	161
P.J.F. DE GRAAF, C.M. BALLINTIJN and F.W. MAES (The Netherlands): Mechanoreceptor activity in the gills of the carp. I. Gill filament and gill raker mechanoreceptors (RSP 01289)	173
P.J.F. DE GRAAF and C.M. BALLINTIJN (The Netherlands): Mechanoreceptor activity in the gills of the carp. II. Gill arch proprioceptors (RSP 01290)	183
H. TSUBONE, O.P. MATHEW and G. SANT'AMBROGIO (U.S.A.): Respiratory activity in the superior laryngeal nerve of the rabbit (RSP 01293)	195

W. E. FORDYCE (U.S.A.): Hypoxic ventilatory control in the awake cat five years after carotid body resection (RSP 01297)	209
E. B. OLSON, JR. (U.S.A.): Ventilatory adaptation to hypoxia occurs in serotonin-depleted rats (RSP 01306)	227
R. ARIELI and L. E. FARHI (U.S.A.): Gravity-induced hyperventilation is caused by a reduced brain perfusion (RSP 01308)	237
G. E. BISGARD, N. A. KRESSIN, A. M. NIELSEN, L. DARISTOTLE, C. A. SMITH and H. V. FORSTER (U.S.A.): Dopamine blockade alters ventilatory acclimatization to hypoxia in goats (RSP 01309)	245
S. JAVAHERI (U.S.A.): Acetazolamide and cerebrospinal fluid ions in dogs with normal acid-base balance (RSP 01307)	257
M. KRÜHØFFER, M. L. GLASS, A. S. ABE and K. JOHANSEN (Denmark): Control of breathing in an amphibian <i>Bufo paracnemis</i> : effects of temperature and hypoxia (RSP 01296)	267

No. 3, September 1987

M. J. B. FINNEY, S. D. ANDERSON and J. L. BLACK (Australia): The effect of non-isotonic solutions on human isolated airway smooth muscle (RSP 01314)	277
M. A. WALL, M. C. MISLEY, A. C. BROWN, W. M. VOLLMER and A. S. BUIST (U.S.A.): Relationship between maldistribution of ventilation and airways obstruction in children with asthma (RSP 01310)	287
P. GUSTIN, M. BAKIMA, P. LEKEUX, F. LOMBA and K. P. VAN DE WOESTIJNE (Belgium): Partitioning of upper airway resistance in Friesian and double-muscled calves (RSP 01311)	299
T. K. ALDRICH (U.S.A.): Transmission fatigue of the rabbit diaphragm (RSP 01312)	307
D. MARLOT, J.-M. MACRON and B. DURON (France): Inhibitory and excitatory effects on respiration by phrenic nerve afferent stimulation in cats (RSP 01315)	321
E. CHANDLER DEAL, JR., M. A. HAXHIU, M. P. NORCIA, E. VAN LUNTEREN and N. S. CHERNIACK (U.S.A.): Cooling the intermediate area of the ventral medullary surface affects tracheal responses to hypoxia (RSP 01317)	335
R. E. WEBER, T. KLEINSCHMIDT and G. BRAUNITZER (F.R.G.): Embryonic pig hemoglobins Gower I ($\zeta_2\epsilon_2$), Gower II ($\alpha_2\epsilon_2$), Heide I ($\zeta_2\theta_2$) and Heide II ($\alpha_2\theta_2$): oxygen-binding functions related to structure and embryonic oxygen supply (RSP 01313)	347
Y. SAKAKIBARA, B. BURTIN and J.-C. MASSABUAU (France): Circadian rhythm of extracellular pH in crayfish at different levels of oxygenation (RSP 01319)	359
E. AGOSTONI and L. ZOCCHI (Italy): Postinspiratory-ramp activity of diaphragm under inspiratory resistive load (RSP 01316)	369
P. J. BUTLER and A. J. WOAKES (U.K.): Heart rate in humans during underwater swimming with and without breath-hold (RSP 01318)	387

